

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
13 January 2005 (13.01.2005)

PCT

(10) International Publication Number
WO 2005/004222 A1

(51) International Patent Classification⁷: **H01L 21/316**,
41/16, C04B 35/491, 35/624, C23C 18/12

6, NL-5656 AA Eindhoven (NL). **KIEWITT, Rainer**
[DE/DE]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven
(NL).

(21) International Application Number:
PCT/IB2004/051085

(74) Agent: **ELEVELD, Koop, J.**; Prof. Holstlaan 6, NL-5656
AA Eindhoven (NL).

(22) International Filing Date: 1 July 2004 (01.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
03102022.5 4 July 2003 (04.07.2003) EP

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(71) Applicant (for all designated States except DE, US):
KONINKLIJKE PHILIPS ELECTRONICS N.V.
[NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven
(NL).

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (for DE only): **PHILIPS INTELLECTUAL
PROPERTY & STANDARDS GMBH** [DE/DE]; Stein-
damm 94, 20099 Hamburg (DE).

(72) Inventors; and

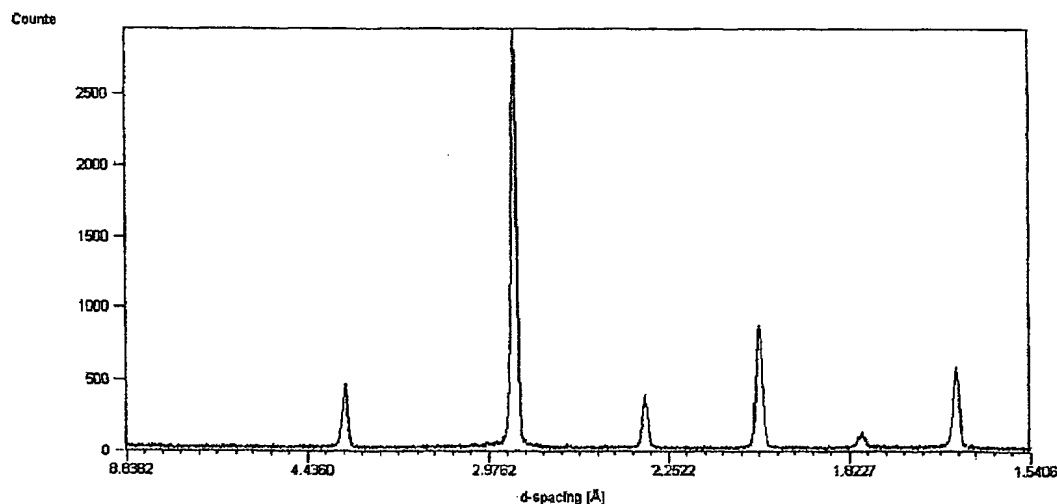
(75) Inventors/Applicants (for US only): **MEYER, Joerg**
[DE/DE]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven
(NL). **KLEE, Mereike, K.** [DE/DE]; c/o Prof. Holstlaan

Published:

— with international search report

[Continued on next page]

(54) Title: PRECURSOR SOLUTION, METHOD OF PREPARATION THEREOF AND USE THEREOF



(57) Abstract: Crystalline, single-phased layers of $\text{PbMg}_{0.33}\text{Nb}_{0.67}\text{O}_3$ with relative dielectric constants of 1500 and more are prepared through the use of a precursor solution that comprises a macrocyclic complexing agent. This agent is added to the lead component in an organic solution. The resulting layer is part of a device which may further include semiconductor elements and resistors.

WO 2005/004222 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.